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EXAMINER				
MYERS, GLENN F				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,749

Applicant(s)

HANS ET AL.

Examiner

GLENN MYERS

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-70 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 42-70 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S&C)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date 12/4/06, 1/30/09

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 12/04/2006 and 1/30/2009 is being considered by the examiner.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the band width of the top band shorter than a band width of the bottom band in Claim 57 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 42 objected to because of the following informalities: "form" in Line 1 of the Claim 42 on Page 4 would read better as "from". In Line 9 of Claim 42 on Page 4 "forma" should be changed to "form a". Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 42-70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 42 recites the limitation "the guide systems" in Line 13 of the claim. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 47 and 48 recite the limitation "the composite material" in Line 2 of Claim 47 and Line 3 of Claim 48. There is insufficient antecedent basis for this limitation in the claim.

9. Claims 52, 53 and 61 recite the limitation "the guide element" in Line 2 of Claim 52, Line 4 of Claim 53 and Line 3 of Claim 61. There is insufficient antecedent basis for this limitation in the claim.
10. In Re Claim 54 it is not clear whether "the guide projections" recited in Line 3 of the claim are the same as the "strip-shaped guide projections" in Line 25 of Claim 42.
11. For examination purposes these will be interpreted as different limitations.
12. In Re Claim 55 it is not clear whether "the guide projections" recited in Line 3 of the claim are the same as the "strip-shaped guide projections" in Line 25 the claim 42.
13. For examination purposes these will be interpreted as different limitations.
14. Claim 55 recites the limitation "the guide elements" in Line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.
15. Claim 55 recites the limitation "the groove-shaped recesses" in Line 6 of the claim. There is insufficient antecedent basis for this limitation in the claim.
16. In Re Claim 56 it is not clear whether "the guide projections" recited in Line 2 of the claim are the same as the "strip-shaped guide projections" in Line 25 of Claim 42. Also, it is not clear whether "the parallel guide planes" in Lines 2 and 3 of the claim are the same as "the guide planes" in Line 16 of Claim 42.
17. For examination purposes these will be interpreted as different limitations.
18. Claim 56 recites the limitation "the middle table" in Line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.
19. Claim 59 recites the limitation "the bottom face" in Line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

20. Claim 59 recites the limitation "the other guide plane" in Line 5 of the claim.

There is insufficient antecedent basis for this limitation in the claim.

21. Claim 60 recites the limitation "the groove-shaped recesses" in Line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

22. Claim 62 recites the limitation "the groove-shaped recesses" in Line 3 of the claim and "the guide elements" in Line 4 of the claim. There is insufficient antecedent basis for these limitations in the claim.

23. Claims 65 and 66 recite the limitation "the locking means" in Line 2 of the claims and "the side wall" in Lines 3 and 4 of the claims. There is insufficient antecedent basis for these limitations in the claim.

24. Claim 67 recites the limitation "the single lever element" in Line 2 of the claim, "the double lever element" in Lines 4 and 5 of the claim, and the Lock Projection in Lines 5 and 6 of the claim. There is insufficient antecedent basis for these limitations in the claim.

25. Claim 68 recites the limitation "the single lever element" in Line 2 of the claim, and "the operating region" in Line 4 of the claim. There is insufficient antecedent basis for these limitations in the claim.

26. Claim 69 recites the limitation "the locking means" in Line 2 of the claim, and "the non-operating position" in Line 3 of the claim. There is insufficient antecedent basis for these limitations in the claim.

27. Claim 70 recites the limitation "the locking means" in Line 3 of the claim, and "the endless conveyor" in Line 5 of the claim. There is insufficient antecedent basis for these limitations in the claim.
28. The "projection distance" is indefinite because it is unclear what is being projected.
29. For examination purposes, "the projection distance" is being interpreted as the distance that the locking means can be raised from its lowest point.
30. The remaining claims are rejected based on dependency to rejected Claim 42.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

31. Claims 42, 49-51, 54-56, 58-62, and 64-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnston et al 3,556,329.
32. In Re Claim 42, as best understood, Johnston et al discloses Load-bearing means for a transport system, in particular for a shelf-stacking device, with a telescopic table (Fig. 3, Load Carrying Unit 35) displaceable in a plane parallel with a support surface (Fig. 4, Top Surface of Platform 76) for accommodating at least one storage aid, e.g. container, box, etc., with a bottom table (Fig. 4, Rails 36, Spaced apart Channels 37) and with an intermediate table (Fig. 4, Lower Platform 39) and top table (Fig. 4, Platform 76) displaceable relative thereto and relative to one another in linear guide systems (Fig. 4, Guide Rollers 38, Guide Rail 36) guide slots 68, 69, Guide Roller 75 and corresponding guide slot shown in Fig. 4) disposed preferably symmetrically by reference to a mid-plane (Plane perpendicular to top surface of platform 76 at the

approximate midpoint of spaced apart channel 37, lower platform 39 and Top Platform 76), and with a drive system (Fig. 1, Motor 43, Drive Shaft 44) between the bottom table and intermediate table and a transmission system (Fig. 6, Sprocket Wheel 91, Chain 84) for displacing the top table depending on the relative movement between the bottom table and the intermediate table, and with the guide systems between the intermediate table and the bottom table and between the intermediate table and the top table disposed in guide planes (Fig. 5, Lower Lip of Rail 36, Horizontal plane through midpoint of guide rollers 75) spaced apart from one another and extending parallel with a bearing surface of the top table (Fig. 4, Top Surface of Platform 76), and with at least one other guide system (Fig. 8, Guide Rollers 97 and corresponding portion of platform 76 and recessed portion of lower platform 39 in area of guide rollers 97), (Fig. 4, Guide Slots 73 and 74) form which forms a guide plane oriented perpendicular thereto and parallel with a displacement direction of the top table, and the transmission system incorporating transmission means is disposed in a transmission plane extending at an angle with respect to a top face (Fig. 4, Top Surface of Platform 76) of the top table and parallel with the displacement direction, wherein strip-shaped guide projections (Fig. 4, Guide Roller 75, Guide Rollers 38) forming the guide planes extending across an entire length of the intermediate table form a top band incorporating the guide systems between the intermediate table and the top table and a bottom band incorporating the guide systems between the intermediate table and the bottom table.

33. In Re Claim 49, Johnston discloses guide systems provided in the form of roller guides (Fig. 4, Guide Rollers 38, Guide Rollers 75).

34. In Re Claim 50, Johnston discloses guide systems in the form of anti-friction bearing guides (Fig. 4, Guide Rollers 38, Guide Rollers 75).
35. In Re Claim 51, Johnston discloses guide systems provided with friction-reducing and wear-resistant guide elements forming strip-shaped guide projections (Fig. 4, Guide Rollers 38, Guide Rollers 75) between recesses.
36. In Re Claim 54, as best understood, Johnston discloses that U-shaped anti-friction sections are secured to the guide projections by a positive and/or frictional clamping action. (Fig. 4, Positive clamping action between guide slots and guide rollers secures the guide rollers to the guide slots.)
37. In Re Claim 55, as best understood, Johnston discloses guide elements on the guide projections are disposed in the longitudinal direction extending on the intermediate table and/or top table and/or bottom table running across an entire length and co-operate with the groove-shaped recesses on the bottom table and/or intermediate table and/or on the top table. (Fig. 4, Guide Rollers 38 and 75)
38. In Re Claim 56, as best understood, Johnston discloses guide projections (Fig. 4, Guide Rollers 38) forming the parallel guide planes are disposed on the middle table, preferably symmetrically by reference to a mid-plane.
39. In Re Claim 58, Johnston et al discloses that a band width of the top band is shorter than a band width of the bottom band. (Fig. 4)
40. In Re Claim 59, as best understood, Johnston et al discloses that groove-shaped recesses (Fig. 4, Guide Slot 73, 74 and Slot 81), are provided in the top face and the bottom face of the intermediate table extending in the direction of longitudinal extension

to form the guide systems providing lateral guidance in the other guide plane (78), which preferably extends perpendicular to the guide planes (47, 48) and parallel with the displacement direction.

41. In Re Claim 60, as best understood, Johnston discloses that the groove-shaped recesses (Fig. 4, Guide Slot 73, 74 and Slot 81) co-operate with the strip-shaped guide projections disposed on the top table and bottom table.

42. In Re Claim 61, as best understood, Johnston et al discloses that strip-shaped guide projections (Fig. 8, Portion of Platform 76 directly over rollers 97), (Fig. 4, Chain 83) are provided with the guide elements.

43. In Re Claim 62 as best understood, Johnston et al discloses U-shaped complementary sections (Fig. 4, Channel in Platform 76 enclosing Guide Roller 75) disposed in a positive or frictional connection in the groove-shaped recesses (Fig. 4, Guide Slots 73 and 74) enclosing the guide elements (Fig. 4, Guide Rollers 75), which are preferably made from coated metal or plastic with good anti-friction properties or coated plastic.

44. In Re Claim 64, Johnston et al discloses locking mechanisms (Fig. 6, Anchor at point 94 and Anchor at point 95) are disposed at opposite end regions of the top table, preferably on side walls, and have locking means which can be displaced relative to the top face of the top table between a position more or less flush with it and a position projecting beyond it.

45. In Re Claim 65, as best understood, Johnston et al discloses that the locking means is provided in the form of a double lever element with a hook-shaped lock

projection (Fig. 12, Bolt holding the anchor at point 94) on the side wall of the top table mounted so as to be pivotable about a pivot axis.

46. In Re Claim 66, as best understood, Johnston et al discloses that the locking means is displaceably connected to a single lever element (Fig. 12, Locking Means connecting the anchor at point 94 to the Chain 84) in a slide block system (Fig. 12, Chain 84) on the side wall which is pivotable about a pivot axis.

47. In Re Claims 67 and 68, as best understood, discloses a single lever element as discussed above.

48. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. ***Ex parte Masham, 2 USPQ2d 1647 (1987).***

49. In Re Claim 69, as best understood, Johnston et al discloses that the locking means is designed to be displaceable between the non-operating position and an operating position in which it projects above the top face (62) of the top table (18).

50. In Re Claim 70, as best understood, Johnston et al discloses that a projection distance, e. g. a hook height, of a catch pawl forming the locking means is preferably bigger than or the same as a vertical distance between support surfaces of the endless conveyors and the bearing surface of the top table.

Claim Rejections - 35 USC § 103

51. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

52. Claims 43-48, 52-53, 57 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al.

53. In Re Claims 43-48, as best understood, Johnston et al discloses the claimed invention except for the bottom table and/or the intermediate table and/or top table being made from fiber and/or fabric reinforced plastic, light metal alloys, carbon fiber reinforced plastic, Kevlar fiber reinforced composites, plastic or reinforcing elements of lightweight metal, steel etc. in the composite material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the bottom table and/or the intermediate table and/or top table from fiber and/or fabric reinforced plastic, light metal alloys, carbon fiber reinforced plastic, Kevlar fiber reinforced composites, plastic or reinforcing elements of lightweight metal, steel etc. in the composite material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Please note that in the instant application, applicant has not disclosed any criticality for the claimed limitations.

54. In Re Claim 52, as best understood, Johnston et al discloses the guide elements provided in the form of a U-shaped anti-friction section (Fig. 4, Channel corresponding with Guide Roller 75 and Guide Slots 68 and 69) and the remainder of the claimed invention except for the U-Shaped anti-friction

section made from a plastic with good anti-friction properties. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the U-shaped anti-friction section from a plastic with good anti-friction properties, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Please note that in the instant application applicant has not disclosed any criticality for the claimed limitations.

55. In Re Claim 53, as best understood, Johnston et al discloses the claimed invention except for a friction-reducing, wear-resistant coating, in particular made from plastic with good anti-friction properties, provided on an external surface of the guide elements. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a friction-reducing, wear-resistant coating, in particular made from plastic with good anti-friction properties, on an external surface of the guide elements, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Please note that in the instant application, applicant has not disclosed any criticality for the claimed limitations.

56. In Re Claim 57, Johnston et al discloses the load bearing means of Claim 42 with a band width of the top band shorter than a band width of the bottom band as

discussed above. However, Johnston et al does not expressly disclose a band width of the top band bigger than a band width of the bottom band.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to make a band width of the top band bigger than a band width of the bottom band because Applicant has not disclosed that a band width of the top band bigger than a band width of the bottom band provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the band width of the top band shorter than the band width of the bottom band because both ways provide similar telescoping characteristics. Therefore, it would have been an obvious matter of design choice to modify Johnston et al to obtain the invention as specified in the claim.

57. In Re Claim 63, Johnston et al discloses the claimed invention except for an angle between the transmission plane and the top face of the top table between 10° and 60°.

58. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make an angle between the transmission plane and the top face of the top table between 10° and 60°, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Please note that in the instant application, applicant has not disclosed any criticality for the claimed limitations.

Conclusion

59. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakatukasa et al 6,523,676 discloses a continuous treatment apparatus. Grabil 5,051,051 discloses a rack and die mover. Reiff 4,523,887 discloses a stacker crane. Wentz 3,792,758 discloses a stacker crane. Zollinger 3,608,749 discloses a storage system. Ruderfer 3,351,219 discloses a warehouse order selection system. Hoffman 5,328,316 discloses an automatic storage and retrieval system. Lemelson 3,750,804 discloses a load handling mechanism. Morikiyo et al 5,819,908 discloses a swinging hook apparatus. Provost et al 3,528,537 discloses a conveyor belt alignment apparatus. Fur 4,248,563 discloses a storage and retrieval system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GLENN MYERS whose telephone number is (571)270-1160. The examiner can normally be reached on Monday - Friday/7:30AM-5:00PM - 1st Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on 571-272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. M./
Examiner, Art Unit 3652

/Saúl J. Rodríguez/
Supervisory Patent Examiner, Art
Unit 3652